

IN THE CLAIMS:

Please amend the claims as follows:

Claims 1-3 (Canceled).

Claim 4 (Currently Amended) A reproduction apparatus for reproducing information from an information storage medium, wherein the information storage medium comprises:

a recording information area; and

an aggregate attribute information area,

wherein the recording information area comprises:

a group information area where one or more group information objects are recorded, each of the group information objects including one or more unit audio information which are logically defined; and

a control data area where control data including group information attribute information is recorded, the control data corresponding to each of the group information objects and controlling the one or more unit audio information included in the corresponding group information objects in a predetermined order, the group information attribute information indicating attributes of all of the unit audio information included in the group recording information objects and wherein

one or more unit audio information attribute information pieces are collectively recorded in the aggregate attribute information area, the one or more unit audio information attribute information pieces corresponding to each of the unit audio information and indicating

attributes of the corresponding unit audio information respectively, and wherein the aggregate attribute information area is formed at a position on the information storage medium such that the one or more unit audio information attribute information pieces can be detected prior to the one or more group information objects and the control data,

wherein the one or more unit audio information attribute information pieces are recorded in a one-to-one correspondence between each of attributes and each of the corresponding unit audio information

and the reproduction apparatus comprises:

a reading unit which reads information from the information storage medium;
a storage unit which stores the aggregate attribute information read by the reading unit;
an input unit which receives, from a user, a reproduction instruction designating the unit audio information ~~objects~~ to be reproduced successively; and

a reproduction unit which sets the attribute for the reproduction based on the aggregate attribute information stored in the storage unit and reproduces the unit audio information ~~objects~~ designated by the user in accordance with the attribute set, wherein said reproduction unit comprises:

an obtaining unit which obtains the attributes corresponding to the unit audio information ~~objects~~ designated by the user from the aggregate attribute information stored in the storage unit;

a determining unit which determines whether or not the obtained attributes of the unit audio information ~~objects~~ to be successively reproduced are identical; and an attribute change unit which starts an attribute setting of the unit audio information ~~object~~ to be

reproduced next immediately after the reproduction of the unit audio information ~~object~~
currently reproduced, if the determining unit determines that the attributes are different.

Claim 5 (Currently Amended) The reproduction apparatus according to claim 4,
wherein the reproduction unit further comprises a search unit which transfers the reading unit
to a recording position on the information storage medium of the unit audio information
~~object~~ to be reproduced next immediately after the reproduction of the unit audio information
~~object~~ currently reproduced, and allows the reproduction unit to start reproduction of the unit
audio information ~~object~~ to be reproduced next after a predetermined waiting time has passed
from the start of the transfer of the reading unit.

Claim 6 (Previously Presented) The reproduction apparatus according to claim 5,
wherein the waiting time is longer than a time required to change the set attribute by the
attribute change unit.

Claim 7 (Currently Amended) A reproduction apparatus for reproducing information
from an information storage medium, wherein the information storage medium comprises:
a recording information area and
an aggregate attribute information area,
wherein the recording information area comprises:

a group information area where one or more group information objects are recorded, each of the group information objects including one or more unit audio information objects which are logically defined; and

a control data area where control data including group information attribute information is recorded, the control data corresponding to each of the group information objects and controlling the one or more unit audio information objects included in the corresponding group information objects in a predetermined order, the group information attribute information indicating attributes of all of the unit audio information included in the group recording information objects

and wherein

one or more unit audio information attribute information pieces are collectively recorded in the aggregate attribute information area, the one or more unit audio information attribute information pieces corresponding to each of the unit audio information and indicating attributes of the corresponding unit audio information respectively, and wherein the aggregate attribute information area is formed at a position on the information storage medium such that the one or more unit audio information attribute information pieces can be detected prior to the one or more group information objects and the control data,

wherein the one or more unit audio information attribute information pieces are recorded in a one-to-one correspondence between each of attributes and each of the corresponding unit audio information and the reproduction apparatus comprises:

a reading unit which reads information from the information storage medium;

a table producing unit which obtains the aggregate attribute information corresponding to the unit audio information recorded on the information storage medium from the reading unit and produces an aggregate attribute information table;

a storage unit which stores the aggregate attribute information table produced by the table producing unit;

an input unit which receives, from a user, a reproduction instruction designating the unit audio information to be reproduced successively; and

a reproduction unit which sets the attribute for the reproduction based on the aggregate attribute information table stored in the storage unit and reproduces the unit audio information designated by the user in accordance with the attribute set, wherein said reproduction unit comprises:

an obtaining unit which obtains the attributes corresponding to each of the unit audio information designated by the user from the aggregate attribute information table stored in the storage unit;

a determining unit which determines whether or not the obtained attributes of the unit audio information to be successively reproduced are identical; and

an attribute change unit which starts an attribute setting of the unit audio information to be reproduced next immediately after the reproduction of the unit audio information currently reproduced, if the determining unit determines that the attributes are different.

Claim 8 (Previously Presented) The reproduction apparatus according to claim 7, wherein the reproduction unit further comprises a search unit which transfers the reading

unit to a recording position on the information storage medium of the unit audio information to be reproduced next immediately after the reproduction of the unit audio information currently reproduced, and allows the reproduction unit to start reproduction of the unit audio information to be reproduced next after a predetermined waiting time has passed from the start of the transfer of the reading unit.

Claim 9 (Previously Presented) The reproduction apparatus according to claim 8, wherein the waiting time is longer than a time required to change the set attribute by the attribute change unit.

Claim 10 (Previously Presented) A reproduction method for reproducing information from an information storage medium, wherein the information storage medium comprises:

a recording information area; and

an aggregate attribute information area,

wherein the recording information area comprises:

a group information area where one or more group information objects are recorded, each of the group information objects including one or more unit audio information which are logically defined; and

a control data area where control data including group information attribute information is recorded, the control data corresponding to each of the group information objects and controlling the one or more unit audio information included in the corresponding group

information objects in a predetermined order, the group information attribute information indicating attributes of all of the unit audio information included in the group recording information objects

and wherein

one or more unit audio information attribute information pieces are collectively recorded in the aggregate attribute information area, the one or more unit audio information attribute information pieces corresponding to each of the unit audio information and indicating attributes of the corresponding unit audio information respectively, and wherein the aggregate attribute information area is formed at a position on the information storage medium such that the one or more unit audio information attribute information pieces can be detected prior to the one or more group information objects and the control data,

wherein the one or more unit audio information attribute information pieces are recorded in a one-to-one correspondence between each of attributes and each of the corresponding unit audio information

and the reproduction method comprises:

reading information from the information storage medium;
storing the aggregate attribute information read in the reading processing storage unit;
receiving, from a user, a reproduction instruction designating the unit audio information to be reproduced successively; and
setting the attribute for the reproduction based on the aggregate attribute information stored in the storage unit and

reproducing the unit audio information designated by the user in accordance with the attribute set, wherein reproducing the unit audio information comprises: obtaining the attributes corresponding to the unit audio information objects designated by the user from the aggregate attribute information stored in the storage unit; determining whether or not the obtained attributes of the unit audio information objects to be successively reproduced are identical; and starting an attribute setting of the unit audio information to be reproduced next immediately after the reproduction of the unit audio information currently reproduced, if it is determined that the attributes are different.

Claim 11 (Previously Presented) The reproduction method according to claim 10, wherein the reproduction method further comprises a search process, the search process comprising:

transferring an information reading position to a recording position on the information storage medium of the unit audio information to be reproduced next immediately after the reproduction of the unit audio information currently reproduced; and starting reproduction of the unit audio information to be reproduced next after a predetermined waiting time has passed from the start of the transfer of the information reading position.

Claim 12 (Previously Presented) The reproduction method according to claim 11, wherein the waiting time is longer than a time required to change the set attribute.

Claim 13 (Currently Amended) A reproduction method for reproducing information from an information storage medium, wherein the information storage medium comprises:

- a recording information area; and
- an aggregate attribute information area,

wherein the recording information area comprises:

- a group information area where one or more group information objects are recorded, each of the group information objects including one or more unit audio information which are logically defined; and

- a control data area where control data including group information attribute information is recorded, the control data corresponding to each of the group information objects and controlling the one or more unit audio information included in the corresponding group information objects in a predetermined order, the group information attribute information indicating attributes of all of the unit audio information included in the group recording information objects and wherein

- one or more unit audio information attribute information pieces are collectively recorded in the aggregate attribute information area, the one or more unit audio information attribute information pieces corresponding to each of the unit audio information and indicating attributes of the corresponding unit audio information respectively, and wherein the aggregate attribute information area is formed at a position on the information storage medium such that

the one or more unit audio information attribute information pieces can be detected prior to the one or more group information objects and the control data,

wherein the one or more unit audio information attribute information pieces are recorded in a one-to-one correspondence between each of attributes and each of the corresponding unit audio information ~~objects~~

and the reproduction method comprises:

reading information from the information storage medium;

obtaining the aggregate attribute information corresponding to the unit audio information ~~objects~~ recorded on the information storage medium from the reading unit to produce an aggregate attribute information table;

storing the produced aggregate attribute information table;

receiving, from a user, a reproduction instruction designating the unit audio information objects to be reproduced successively;

setting the attribute for the reproduction based on the aggregate attribute information table stored in the ~~strange storage~~ unit; and

reproducing the unit audio information objects designated by the user in accordance with the attribute set,

wherein reproducing the unit audio information comprises:

obtaining the attributes corresponding to ~~corresponding to~~ the unit audio information designated by the user from the aggregate attribute information table stored in the storage unit;

determining whether or not the attributes of the unit audio information to be successively reproduced are identical; and

starting an attribute setting of the unit audio information ~~object~~ to be reproduced next immediately after the reproduction of the unit audio information ~~object~~ currently reproduced, if it is determined that the attributes are different.

Claim 14 (Currently Amended) The reproduction method according to claim 13, wherein the reproduction method further comprises a search process, the search process comprising:

transferring an information reading position to a recording position on the information storage medium of the unit audio information ~~object~~ to be reproduced next immediately after the reproduction of the unit audio information ~~object~~ currently reproduced; and

starting reproduction of the unit audio information ~~object~~ to be reproduced next after a predetermined waiting time has passed from the start of the transfer of the information reading position.

Claim 15 (Previously Presented) The reproduction method according to claim 14, wherein the waiting time is longer than a time required to change the set attribute.

Claims 16-43 (Canceled).

Claim 44 (Previously Presented) An information storage medium comprising:
a recording information area and
an aggregate attribute information area,

wherein the recording information area comprises:

 a group information area where one or more group information objects are recorded, each of the group information objects including one or more unit audio information which are logically defined; and

 a control data area where control data including group information attribute information is recorded, the control data corresponding to each of the group information objects and controlling the one or more unit audio information included in the corresponding group information objects in a predetermined order, the group information attribute information indicating attributes of all of the unit audio information included in the group recording information objects

and wherein

 one or more unit audio information attribute information pieces are collectively recorded in the aggregate attribute information area, the one or more unit audio information attribute information pieces corresponding to each of the unit audio information and indicating attributes of the corresponding unit audio information respectively, and wherein the aggregate attribute information area is formed at a position on the information storage medium such that the one or more unit audio information attribute information pieces can be detected prior to the one or more group information objects and the control data,

 wherein the one or more unit audio information attribute information pieces are recorded in a one-to-one correspondence between each of attributes and each of the corresponding unit audio information.

Claim 45 (Previously Presented) The information storage medium according to claim 44, wherein the aggregate attribute information area is formed within a management information area where management information is recorded, the management information being information to manage information recorded on the information storage medium.

Claim 46 (Previously Presented) The information storage medium according to claim 44, wherein at least one unit audio information attribute information piece comprises: information indicating a sampling frequency of at least one unit audio information; and a quantization bit number of the at least one unit audio information corresponding to the at least one unit audio information attribute information piece.

Claim 47 (Previously Presented) The information storage medium according to claim 45, wherein at least one unit audio information attribute information piece comprises: information indicating a sampling frequency of at least one unit audio information; and a quantization bit number of the at least one unit audio information corresponding to the at least one unit audio information attribute information piece.

Claim 48 (Previously Presented) The information storage medium according to claim 44, wherein the group information attribute information comprises: a number of at least one unit audio information; playback time of the at least one unit audio information;

a start address of the at least one unit audio information on the information storage medium; and

an end address of the at least one unit audio information on the information storage medium; and

a corresponding unit audio information attribute information piece.

Claim 49 (Previously Presented) The information storage medium according to claim 45, wherein the group information attribute information comprises:

a number of at least one unit audio information;

playback time of the at least one unit audio information;

a start address of the at least one unit audio information on the information storage medium; and

an end address of the at least one unit audio information on the information storage medium; and

a corresponding unit audio information attribute information piece.

Claim 50 (Previously Presented) The information storage medium according to claim 46, wherein the group information attribute information comprises:

a number of at least one unit audio information;

playback time of the at least one unit audio information;

a start address of the at least one unit audio information on the information storage medium; and

an end address of the at least one unit audio information on the information storage medium; and

a corresponding unit audio information attribute information piece.

Claim 51 (Previously Presented) The information storage medium according to claim 47, wherein the group information attribute information comprises:

a number of at least one unit audio information;

playback time of the at least one unit audio information;

a start address of the at least one unit audio information on the information storage medium; and

an end address of the at least one unit audio information on the information storage medium; and

a corresponding unit audio information attribute information piece.

Claim 52 (Currently Amended) A reproduction apparatus for reproducing information from an information storage medium, wherein said information storage medium comprises:

a recording information area; and

an aggregate attribute information area,

wherein the recording information area comprises:

a group information area where one or more group information objects are recorded, each of the group information objects including one or more unit audio information which are logically defined; and

a control data area where control data including group information attribute information is recorded, the control data corresponding to each of the group information objects and controlling the one or more unit audio information included in the corresponding group information objects in a predetermined order, the group information attribute information indicating attributes of all of the unit audio information included in the group recording information objects

and wherein

one or more unit audio information attribute information pieces are collectively recorded in the aggregate attribute information area, the one or more unit audio information attribute information pieces corresponding to each of the unit audio information and indicating attributes of the corresponding unit audio information respectively, and wherein the aggregate attribute information area is formed at a position on the information storage medium such that the one or more unit audio information attribute information pieces can be detected prior to the one or more group information objects and the control data,

wherein the one or more unit audio information attribute information pieces are recorded in a one-to-one correspondence between each of attributes and each of the corresponding unit audio information, and the reproduction apparatus comprising:

a detecting unit which detects the one or more unit audio information attribute information pieces from the aggregate information area; and

a reproducing unit which reproduces the one or more unit audio information objects based on the detected one or more unit audio information attribute information pieces.

Claim 53 (Previously Presented) The reproduction apparatus according to claim 52, wherein the aggregate attribute information area is formed within a management information area where management information is recorded, the management information being information to manage information recorded on the information storage medium.

Claim 54 (Previously Presented) The reproduction apparatus according to claim 52, wherein at least one unit audio information attribute information piece comprises: information indicating a sampling frequency of at least one unit audio information; and a quantization bit number of the at least one unit audio information corresponding to the at least one unit audio information attribute information piece.

Claim 55 (Previously Presented) The reproduction apparatus according to claim 52, wherein at least one unit audio information attribute information piece comprises: information indicating a sampling frequency of at least one unit audio information; and a quantization bit number of the at least one unit audio information corresponding to the at least one unit audio information attribute information piece, and wherein the aggregate attribute information area is formed within a management information area where management information is recorded, the management information being information to manage information recorded on the information storage medium.

Claim 56 (Previously Presented) The information storage medium according to claim 52, wherein the group information attribute information comprises:

a number of at least one unit audio information;

playback time of the at least one unit audio information;

a start address of the at least one unit audio information on the information storage medium; and

an end address of the at least one unit audio information on the information storage medium; and

a corresponding unit audio information attribute information piece.

Claim 57 (Previously Presented) The reproduction apparatus according to claim 52, wherein the group information attribute information comprises:

a number of at least one unit audio information;

playback time of the at least one unit audio information;

a start address of the at least one unit audio information on the information storage medium; and

an end address of the at least one unit audio information on the information storage medium; and

a corresponding unit audio information attribute information piece, and

wherein the aggregate attribute information area is formed within a management information area where management information is recorded, the management information being information to manage information recorded on the information storage medium.

Claim 58 (Previously Presented) The reproduction apparatus storage medium according to claim 52, wherein the group information attribute information comprises:

a number of at least one unit audio information;

playback time of the at least one unit audio information;

a start address of the at least one unit audio information on the information storage medium; and

an end address of the at least one unit audio information on the information storage medium; and

a corresponding unit audio information attribute information piece, and

wherein the corresponding unit audio information attribute information piece comprises:

information indicating a sampling frequency of the at least one unit audio information; and

a quantization bit number of the at least one unit audio information corresponding to the corresponding unit audio information attribute information piece.

Claim 59 (Previously Presented) The reproduction apparatus storage medium according to claim 52, wherein the group information attribute information comprises:

a number of at least one unit audio information;

playback time of the at least one unit audio information;

a start address of the at least one unit audio information on the information storage medium; and

an end address of the at least one unit audio information on the information storage medium; and

a corresponding unit audio information attribute information piece,

and wherein the corresponding unit audio information attribute information piece comprises,

information indicating a sampling frequency of the at least one unit audio information; and

a quantization bit number of the at least one unit audio information corresponding to the corresponding unit audio information attribute information piece, and wherein the aggregate attribute information area is formed within a management information area where management information is recorded, the management information being information to manage information recorded on the information storage medium.

Claim 60 (Currently Amended) A reproduction method for reproducing information from an information storage medium, wherein said information storage medium comprises:

a recording information area and

an aggregate attribute information area,

wherein the recording information area comprises:

a group information area where one or more group information objects are recorded, each of the group information objects including one or more unit audio information objects which are logically defined; and

a control data area where control data including group information attribute information is recorded, the control data corresponding to each of the group information objects and controlling the one or more unit audio information included in the corresponding group information objects in a predetermined order, the group information attribute information indicating attributes of all of the unit audio information included in the group recording information objects

and wherein

one or more unit audio information attribute information pieces are collectively recorded in the aggregate attribute information area, the one or more unit audio information attribute information pieces corresponding to each of the unit audio information and indicating attributes of the corresponding unit audio information respectively, and wherein the aggregate attribute information area is formed at a position on the information storage medium such that the one or more unit audio information attribute information pieces can be detected prior to the one or more group information objects and the control data,

wherein the one or more unit audio information attribute information pieces are recorded in a one-to-one correspondence between each of attributes and each of the corresponding unit audio information,

and the reproduction method comprising:

detecting the one or more unit audio information attribute information pieces from the aggregate information area; and

reproducing the one or more unit audio information based on the detected one or more unit audio information attribute information pieces.

Claim 61 (Previously Presented) The reproduction method according to claim 60, wherein the aggregate attribute information area is formed within a management information area where management information is recorded, the management information being information to manage information recorded on the information storage medium.

Claim 62 (Previously Presented) The reproduction method according to claim 60, wherein at least one unit audio information attribute information piece comprises: information indicating a sampling frequency of at least one unit audio information; and a quantization bit number of the at least one unit audio information corresponding to the at least one unit audio information attribute information piece.

Claim 63 (Previously Presented) The reproduction method according to claim 60, wherein at least one unit audio information attribute information piece comprises: information indicating a sampling frequency of at least one unit audio information; and a quantization bit number of the at least one unit audio information corresponding to the at least one unit audio information attribute information piece, and wherein the aggregate attribute information area is formed within a management information area where management information is recorded, the management information being information to manage information recorded on the information storage medium.

Claim 64 (Previously Presented) The reproduction method according to claim 60, wherein the group information attribute information comprises:

a number of at least one unit audio information;

playback time of the at least one unit audio information;

a start address of the at least one unit audio information on the information storage medium; and

an end address of the at least one unit audio information on the information storage medium; and

a corresponding unit audio information attribute information piece.

Claim 65 (Previously Presented) The reproduction method according to claim 60, wherein the group information attribute information comprises:

a number of at least one unit audio information;

playback time of the at least one unit audio information;

a start address of the at least one unit audio information on the information storage medium; and

an end address of the at least one unit audio information on the information storage medium; and

a corresponding unit audio information attribute information piece, and

wherein the aggregate attribute information area is formed within a management information area where management information is recorded, the management information being information to manage information recorded on the information storage medium.

Claim 66 (Currently Amended) The reproduction method according to claim 60, wherein the group information attribute information comprises:

 a number of at least one unit audio information;

 playback time of the at least one unit audio information;

 a start address of the at least one unit audio information on the information storage medium; and

 an end address of the at least one unit audio information on the information storage medium; and

 a corresponding unit audio information attribute information piece, and

wherein the corresponding unit audio information attribute information piece comprises: ~~and~~

 information indicating a sampling frequency of the at least one unit audio information;

 and

 a quantization bit number of the at least one unit audio information corresponding to the corresponding unit audio information attribute information piece.

Claim 67 (Previously Presented) The reproduction method according to claim 60, wherein the group information attribute information comprises:

 a number of at least one unit audio information;

 playback time of the at least one unit audio information;

 a start address of the at least one unit audio information on the information storage medium; and

an end address of the at least one unit audio information on the information storage medium; and

a corresponding unit audio information attribute information piece, and

wherein the corresponding unit audio information attribute information piece comprises:

information indicating a sampling frequency of the at least one unit audio information; and

a quantization bit number of the at least one unit audio information corresponding to the corresponding unit audio information attribute information piece, and wherein the aggregate attribute information area is formed within a management information area where management information is recorded, the management information being information to manage information recorded on the information storage medium.

Claim 68 (Previously Presented) An information recording apparatus comprising:

a first generating device which generates recording information comprising one or more group information objects, each of the group information objects including one or more unit audio information which are logically defined;

a second generating device which generates additional information comprising control data and unit audio information attribute information pieces, the control data corresponding to each of the group information objects and controlling the one or more unit audio information included in the corresponding group information objects in a predetermined order, and including group information attribute information indicating attributes of all of the unit audio information included in the group recording information

objects, and the unit audio information attribute information pieces indicating attributes of the one or more unit audio information respectively; and

a recording device which records the recording information and the additional information into an information storage medium,

wherein the unit audio information attribute information pieces are recorded at a position on the information storage medium such that the unit audio information attribute information pieces can be detected prior to the one or more group information objects and the control data,

wherein the one or more unit audio information attribute information pieces are recorded in a one-to-one correspondence between each of attributes and each of the corresponding unit audio information.

Claim 69 (Canceled).